



MARKED SET OF AMENDED CLAIMS

27. (Once Amended) A method for optically examining a microlocation on an object comprising the steps of:

illuminating at least a portion of the object by scanning light from a source through a scanning [confocal] microscope onto the object, and detecting light reflected from the portion of the object through the scanning [confocal] microscope, wherein the portion comprises an area having a plurality of microlocations.

determining [the] a position of [the] a microlocation in the portion by analyzing the detected reflected light,

illuminating [a] the microlocation with light from the source through the scanning [confocal] microscope utilizing the determined position of the microlocation, and detecting emitted radiation from the microlocation to thereby examine the microlocation.

28. (Once Amended) The method of claim 27 for optically examining a microlocation wherein the step of determining the position of the microlocation includes determining microlocation patterns in the portion by analyzing the detected reflected light, and [use of] examining the microlocation patterns to determine the position of the microlocation. [information regarding the microlocation patterns.]

31. (Once Amended) A method for examining at least one microlocation on an object having multiple microlocations separated by interstitial areas comprising the steps of:

simultaneously illuminating multiple microlocations [points] on the object to be examined,

detecting reflected radiation from the object to be examined,

comparing the information constituting reflected radiation with information regarding the structure of the object to be examined[, whereby] to determine [the] position information of a microlocation on the object[ is determined], wherein the microlocation is chosen from the illuminated multiple microlocations, [and]

illuminating [one] the microlocation through a [confocal] microscope based upon the position information, and

detecting emitted radiation from the microlocation to thereby examine the microlocation.

32. (Once Amended) The method of claim 31 for [alignment] examining at least one microlocation on [of] an object having multiple microlocations, [wherein] comprising examining a plurality of microlocations [the multiple points of detection are gathered] by illuminating [scanning the radiation over] at least two microlocations and one interstitial area, and detecting emitted radiation from the at least two microlocations to thereby examine the microlocations.

33. (Once Amended) A method for determining fluorescence intensity from multiple microlocations disposed on the surface of a biological diagnostic system comprising the steps of:

scanning an entire area of the surface of the diagnostic system, said surface having disposed thereon [which includes] the microlocations, with a laser source directed through a scanning [confocal] optical system, wherein the microlocations reflect light,  
detecting light reflected from the microlocations with a detector,  
determining the positions of the microlocations by imaging the reflected light,  
illuminating one microlocation from the entire area through the [confocal] optical system based upon the determined position of the one microlocation, wherein the illumination does not extend substantially beyond the one microlocation, and wherein the one microlocation emits fluorescence,  
detecting the fluorescence from the one microlocation via the [confocal] microscope, where the detector masks emissions from the object in regions other than the one microlocation, and  
determining an intensity of the detected fluorescence from the one microlocation.